U.S.S.N. 10/713,472 Filed: November 14, 2003 AMENIOMENT

IN THE CLAIMS

Claims 22-42 (CANCELLED)

- 43. (currently amended) An isolated, Δ mammalian adult neuroendocrine stem undifferentiated cell population isolated by digestion of dissociated neuroendocrine tissue with a trypsin like enzyme.
- 44. (currently amended) A The undifferentiated stem cell population of claim 43, wherein the undifferentiated cell population is isolated from adrenal gland or pancreas tissue.

 Claims 45-53 (CANCELLED)
- 54. (currently amended; renumbered) The <u>undifferentiated</u> cell <u>population</u> of claim 43 isolated by digestion of the tissue with trypsin, <u>washing the cells with buffer</u> and isolation of the cells by centrifugation at 1200 rpm for five minutes <u>sufficient to separate the undifferentiated</u> intact cells from the buffer.
- 55. (new) The undifferentiated cell population of claim 43 isolated from the hypothalamus, pituitary, parathyroid, or thyroid.
- 56. (new) The undifferentiated cell population of claim 43 isolated from along the intestinal tract or the sorta.
- 57. (new) The undifferentiated cell population of claim 43 wherein the tissue is digested under conditions equivalent to 0.05% trypsin at 37°C for five minutes
- 58. (new) The undifferentiated cell population of claim 43 further comprising a hydrogel support structure.

6

VAC102con2 095150/7

PACE 11/18 * RCVD AT 11/18/2005 4:08:33 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-6/31 * DNIS:2738300 * CSID:706 283 7737 * DURATION (mm-55):04-10

U.S.S.N. 10/713,472 Filed: November 14, 2003

AMENDMENT

59. (new) The undifferentiated cell population of claim 58 further comprising a structure selected from the group consisting of a coral, hydroxyapatite, metallic, inorganic, ceramic, or polymeric fibers, mesh, struts, or sponge.

- 60. (new) The undifferentiated cell population of claim 43 further comprising a polymeric support structure.
- 61. (new) The undifferentiated cell population of claim 43 further comprising a support structure and factors selected from the group consisting of growth factors, nutrients, and drugs.

7